Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

CLAIMS

1.   (Currently Amended) ~~Electronic~~ An electronic circuit for determining a ratio of a first frequency of a first signal and a second frequency of a second signal, the electronic circuit comprising:

[[-]]a first counter and a second counter;

[[-]]   a sampling means for sampling first intermediate count values of the first counter when the second counter reaches preset second intermediate count values such that the first counter is sampled under the control of the second counter;

[[-]]   wherein the first and second intermediate count values form a plurality of pairs of intermediate count values of the first and second counters;

[[-]]   wherein, during the sampling of the first intermediate count values, the first and second counters continue counting; and

[[-]]   a calculation unit for determining the ratio of the first and second frequencies on the basis of the plurality of pairs of intermediate count values;

wherein more than two pairs of intermediate count values are used by the calculation unit for determining the ratio of the first and second frequencies;

wherein the ratio of the first and second frequencies is calculated based at least on a regression from pairs of intermediate count values corresponding to different numbers of samples.

2.   (Canceled)

3

3.   (Currently Amended) The electronic circuit of claim ~~2~~1,~~-~~ wherein the first counter is triggered by one of a rising edge and a falling edge of the first signal;[[-]] wherein the second counter is triggered by one of a rising edge and a falling edge of the second signal; [[-]]wherein a clock signal of the second counter is one of the first and second signals ; [[-]]and wherein the second intermediate count values of the second counter at which the first counter is sampled are preset in a register.

4.   (Currently Amended) The electronic circuit according to claim ~~2~~1, further ~~comprising :~~ a memory comprising;~~wherein the memory comprises~~ a first and a second storage ; ~~wherein the first storage is for storing the first intermediate count values of the first counter such that a sequence of first intermediate count values of the first counter is provided and the second storage is for storing the second intermediate count values of the second counter such that a sequence of second intermediate count values of the second counter is provided.

5.   (Currently Amended) The electronic circuit according to claim 1,

[[-]]   wherein the calculation unit is implemented by a processor;

[[-]]   wherein the plurality of pairs of intermediate count values are stored in a working memory of the processor; and

[[-]]   wherein the working memory is accessed for one of reading and writing of the plurality of pairs of intermediate count values by interrupt routines.

6.   (Currently Amended) The electronic circuit of claim 1, [[-]]wherein the calculation unit determines a variation of the frequency ratio over the time.

7.   (Currently Amended) ~~Method~~ A method of determining a ratio of a first frequency of a first signal and a second frequency of a second signal, the method comprising the steps of~~-~~:

[[-]]—sampling first intermediate count values of a first counter of a frequency measurement circuit when a second counter of the frequency measurement circuit reaches preset

second intermediate count values such that the first counter is sampled under the control of the second counter;

[[-]]——wherein the first and second intermediate count values form a plurality of pairs of intermediate count values of the first and second counters-;

[[-]]——wherein, during the sampling of the first intermediate count values, the first and second counters continue counting; and

[[-]]——determining the ratio of the first and second frequencies on the basis of the plurality of pairs of intermediate count values;

wherein more than two pairs of intermediate count values are used by the calculation unit for determining the ratio of the first and second frequencies;

calculating the ratio of the first and second frequencies based at least on a regression from pairs of intermediate count values corresponding to different numbers of samples.

8.   (Canceled)

9.   (Currently Amended)   Computer program product comprising computer program code means, wherein the computer program code means A computer readable medium storing instructions that, when executed, cause causes a processor to perform the following operation when the computer program code means is executed on the processor determine a ratio of a first frequency of a first signal and a second frequency of a second signal, by performing a method:

[[-]]——sampling first intermediate count values of a first counter when a second counter reaches preset second intermediate count values such that the first counter is sampled under the control of the second counter-;

[[-]]——wherein the first and second intermediate count values form a plurality of pairs of intermediate count values of the first and second counters;

[[-]]——wherein, during the sampling of the first intermediate count values, the first and second counters continue counting; and

[[-]]——determining the ratio of the first and second frequencies on the basis of the plurality of pairs of intermediate count values;

wherein more than two pairs of intermediate count values are used for determining the ratio of the first and second frequencies;

wherein the ratio of the first and second frequencies is calculated based at least on a regression from pairs of intermediate count values corresponding to different numbers of samples.

10.   (Canceled)

11.   (New)   The method of claim 7, comprising:

triggering the first counter by one of a rising edge and a falling edge of the first signal;

triggering the second counter by one of a rising edge and a falling edge of the second signal;

wherein a clock signal of the second counter is one of the first and second signals; and

wherein the second intermediate count values of the second counter at which the first counter is sampled are preset in a register.

12.   (New)   The method of claim 7, comprising:

storing the first intermediate count values of the first counter such that a sequence of first intermediate count values of the first counter is provided; and

storing the second intermediate count values of the second counter such that a sequence of second intermediate count values of the second counter is provided.